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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,906	09/30/2003	Boyd B. Moore	HO-P01715US2	2934
26271	7590	08/09/2007		
FULBRIGHT & JAWORSKI, LLP 1301 MCKINNEY SUITE 5100 HOUSTON, TX 77010-3095			EXAMINER ESTRADA, ANGEL R	
			ART UNIT 2831	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

7/17

<b>Office Action Summary</b>	<b>Application No.</b> 10/675,906	<b>Applicant(s)</b> MOORE, BOYD B.	
	<b>Examiner</b> Angel R. Estrada	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/30/07</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on April 30, 2007 has been considered by the Examiner.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Head (US 6,112,813).

Regarding claim 25, Head discloses a conductive wire line (1) comprising a small diameter tubing (102) having an outer diameter and an inner diameter (see figure 7), the tubing having an outer diameter; and one or more optical fibers (16) extending through the inner diameter of the tubing, the one or more optical fibers (16) having a helical configuration (see figure 7) inside the tubing so that the one or more optical fibers have a length longer than the tubing in which the one or more optical fibers extend; but Head lacks the tubing having an outer diameter between 1/8"- 1/2"; It would have been obvious to one having ordinary skill in the art at the time the invention was made to the tubing having an outer diameter between 1/8"- 1/2", since it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to

discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235

Regarding claim 26, Head discloses the conductive wire line (1) further including one or more insulated conductor wires extending along the inner diameter of the tubing (see figure 7).

Regarding claim 27, Head discloses the conductive wire line (1), wherein the one or more insulated conductor wires (see figure 7) have a helical configuration inside the tubing so that the one or more insulated conductor wires have a length longer than the tubing in which the one or more insulated conductor wires extend (see figure 7)

Regarding claim 28, the modified Head discloses the claimed invention except for the tubing is at least 1,000 ft. in length. It would have been an obvious matter of design choice to make the length of the tubing of at least 1000ft, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

Regarding claim 29, Head discloses the conductive wire line (1), wherein the tubing has an inner diameter less than about two-times the diameter of the one or more insulated conductor wires (see figure 7).

Regarding claim 30, Head discloses the conductive wire line (1), wherein the tubing (102) is formed of a metal material (notice the wire cross section hatching, it resembles a metal); but Head lacks the material being stainless steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the tubing of a stainless steel material, since it has been held to be within the

general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d, 125 USPQ 416 (CCPA 1960).

Regarding claim 31, Head discloses the conductive wire line (1), wherein the tubing (102) is formed of a metal material (notice the wire cross section hatching, it resembles a metal); but Head lacks the material being nickel alloy or stainless steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the tubing of a stainless steel material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d, 125 USPQ 416 (CCPA 1960).

Regarding claim 32, Head discloses the conductive wire line (1), wherein the tubing (1) is coiled tubing (see figure 7).

Regarding claim 33, Head discloses the conductive wire line (1), wherein the one or more optical fibers (see figure 7) inside the tubing (1) is supported through frictional interface between an outer surface of the one or more optical fibers and an inner surface of the tubing (see figure 7).

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 25-33 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

4. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) OR 571-272-1000.

August 3, 2007



Angel R. Estrada  
Primary Examiner  
Art Unit: 2831